COMPLETE LISTING OF ALL CLAIMS

- 1-14. (canceled)
- 15. (currently amended) The method of claim 14 claim 27, wherein the mat-form insulating material further comprises
- c) an amount, up to 30% by weight of further polyacrylonitrile fibers and/or and optionally
 - d) up to 20% by weight of additives.
- 16. (previously presented) The method of claim 14 claim 27, wherein the polyalkylene terephthalate fiber is selected from polyethylene terephthalate fibers, polybutylene terephthalate fibers or mixtures thereof.
 - 17. (canceled)
 - 18. (canceled)
- 19. (currently amended) The method of claim 17 <u>claim 27</u>, wherein the individual fiber linear density of the bicomponent fibers is within the range of from 1 to 20 dtex.
- 20. (currently amended) The method of claim 14 <u>claim 27</u>, further comprising producing the mat-form insulating material by

mixing the melamine resin fiber and the polyalkylene terephthalate fiber to form a mixture,

laying down the mixture to form a mat, and heating the mat.

21. (currently amended) The method of claim 20, wherein the polyalkylene fiber

is a bicomponent fiber having a core/sheath construction comprising a polyester core
and a copolyester sheath and wherein the temperature of the heating is higher than the
melting temperature of the sheath and lower than the melting temperature of the core.

- 22. (previously presented) The method of claim 27, wherein the melting temperature of the core of the bicomponent fibers is within the range of from 230 to 280°C.
- 23. (previously presented) The method of claim 27, wherein the melting temperature of the sheath of the bicomponent fibers is within the range of from 100 to 130°C.
- 24. (currently amended) The method of claim 17 claim 27, wherein the individual fiber linear density of the bicomponent fibers is within the range of from 2 to 15 dtex.
- 25. (currently amended) The method of claim 12 <u>claim 27</u>, wherein the insulating material has a density of from 15 to 50 gl⁻¹.
 - 26. (currently amended) A mat-form insulating material comprising:
- i) from 5 to 95% by weight of melamine resin fibers, which are obtained by condensing a melamine-containing mixture with formaldehyde or formaldehyde-supplying compounds in a molar ratio of melamines to formaldehyde within the range of 1:1.15 to 1:4.5, said melamine-containing mixture comprising
 - (A) from 90 to 99.9 mol% of a mixture comprising
 - (a) from 30 to 99.9 mol% of melamine and
 - (b) from 1.0 to 70 mol% of a substituted melamine of the formula I

where X^1 , X^2 and X^3 are each selected from -NH₂, -NHR¹ and -NR¹R², subject to the proviso that X^1 , X^2 and X^3 are not all -NH₂, and R¹ and R² are independently selected from hydroxy-C₂-C₂₀-alkyl, hydroxy-C₂-C₄-alkyl-(oxa-C₂-C₄-alkyl)_n, where n is 1 to 5, and amino-C₂-C₁₂-alkyl, or mixtures of melamines of formula I, and

- (B) from 0.1 to 10 mol%, based on (A) and (B), of a compound selected from phenols which are unsubstituted or substituted by radicals selected from C_1 - C_9 -alkyl and hydroxyl, C_1 - C_4 -alkanes substituted by two or three phenol groups, di(hydroxyphenyl) sulfones or mixtures thereof,
 - ii) from 5-95% by weight of polyalkylene terepthalate fibers,
 - iii) an amount, up to 30% by weight, of polyacrylonitrile fibers, and optionally
 - iii) up to 20% by weight of additive,

wherein the polyalkylene terephthalate fibers are selected from polyethylene terephthalate fibers, polybutylene terephthalate fibers or a mixture thereof.

wherein the polyalkylene terephthalate fibers are bicomponent fibers having a core/sheath construction comprising a polyester core and a copolyester sheath, and wherein the melting temperature of the core of the bicomponent fibers is within the range from 200 to 300°C, and the melting temperature of the sheath is within the

range of from 80 to 150°C.

27. (previously presented) A method of thermally or acoustically insulating a building, said method comprising installing a mat-form insulating material in the

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building,

wherein the insulating material comprises from 5 to 95 % by weight of at least one modified melamine resin fiber and from 5 to 95% by weight of a polyalkylene terephthalate fiber,

wherein said melamine fiber is obtained by condensing a melamine containing mixture with formaldehyde or a formaldehyde-supplying compound in a molar ratio of melamine to formaldehyde within the range from 1:1.15 to 1:4.5, said melamine mixture comprising

- (A) from 90 to 99.9 mol% of a mixture comprising
 - (a) from 30 to 99.9 mol% of melamine and
 - (b) from 1.0 to 70 mol% of a substituted melamine of the general formula I

$$\begin{array}{c}
X_1 \\
N \\
N \\
X_3
\end{array}$$
(1)

where X^1 , X^2 and X^3 are each selected from -NH₂, -NHR¹ and -NR¹R², subject to the proviso that X^1 , X^2 and X^3 are not all -NH₂, and R¹ and R² are independently selected from hydroxy-C₂-C₂₀-alkyl, hydroxy-C₂-C₄-alkyl-(oxa-C₂-C₄-alkyl)_n, where n is 1 to 5, and amino-C₂-C₁₂-alkyl, or mixtures of melamines of formula I, and

(B) from 0.1 to 10 mol%, based on (A) and (B), of a compound selected from phenols which are unsubstituted or substituted by radicals selected from C_1 - C_9 -alkyl and hydroxyl, C_1 - C_4 -alkanes substituted by two or three phenol groups,

di(hydroxyphenyl) sulfones or mixtures thereof,

wherein the insulating material has a density of from 10 to 150 gl⁻¹,
wherein the thickness of the mat-form insulating material is from 20 to 200 mm,
wherein the polyalkylene terephthalate fiber is selected from a polyethylene
terephthalate fiber, a polybutylene terephthalate fiber or a mixture thereof,

wherein the polyalkylene terephthalate fiber is a bicomponent fiber having a core/sheath construction comprising a polyester core and a copolyester sheath, and wherein the melting temperature of the core of the bicomponent fiber is within the range from 200 to 300°C, and the melting temperature of the sheath is within the range of from 80 to 150°C.

- 28. (currently amended) The method of claim 12 <u>claim 27</u>, wherein the mat-form insulating material has a DIN 52 612 thermal conductivity of not more than 0.045 W m⁻¹ K⁻¹.
- 29. (currently amended) The method of claim 12 claim 27, wherein the mat-form insulating material has a DIN 52 215-83 sound adsorption, converted from perpendicular to stationary sound incidence, of not less than 92%.